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A Cross-sectional Examination of What Smokers Perceive to be Important and Their Willingness to Pay for Tobacco Cessation Medications

Shanta R. Dube, PhD, MPH, Michael F. Pesko, PhD, and Xin Xu, PhD

Division of Epidemiology and Biostatistics, School of Public Health, Georgia State University, Atlanta (Dr Dube); Department of Healthcare Policy and Research, Weill Cornell Medical College, New York, New York (Dr Pesko); and National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, Centers for Disease Control and Prevention, Atlanta, Georgia (Dr Xu)

Abstract

Context—Tobacco smoking is the leading cause of preventable morbidity and mortality in the United States, and smoking cessation has multiple health benefits.

Objective—The purpose of this study was to assess cigarette smokers' perceived importance toward characteristics of tobacco cessation medications using a willingness-to-pay approach.

Design, Setting, and Participants—Cross-sectional analysis of data from the 2008 *HealthStyles* survey, a mail-based probability sample of 5399 adults aged 18 years and older. Point estimates and 95% confidence intervals were calculated overall and by sociodemographic and smoking behavior characteristics. Multivariate Probit regression analysis was used to evaluate smokers' willingness to pay in relation to perceived importance of 3 cessation medication characteristics: convenience of use, over-the-counter availability, and efficiency to help quit. All models controlled for sociodemographic characteristics, smoking behavior characteristics, and US regional fixed effects. A total of 914 current cigarette smokers.

Main Outcome Measures—Interest in quitting, interest in using cessation medications, and willingness to pay for 6 types of cessation medications.

Results—Approximately 68.4% of current cigarette smokers were interested in quitting. Among these individuals, 45.6% indicated that they were interested in using cessation medications, and of these, 47.3% indicated that they were willing to pay \$150 or more out-of-pocket for these medications. Convenience of use and the effectiveness of these medications to help quit were positively associated with current smokers' willingness to pay for \$300 or more ($P < .05$); however, no association was observed for over-the-counter availability. Self-reported exposure to telephone quitline advertisements was also positively associated with the willingness to pay.

Correspondence: Shanta R. Dube, PhD, MPH, Division of Epidemiology and Biostatistics, School of Public Health, Georgia State University, 1 Park Place, Ste 711, Atlanta GA 30303 (sdube2@gsu.edu).

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Conclusions—Approximately 68% of current smokers are interested in quitting, and about half of those smokers interested in quitting are also interested in using cessation medications. Convenience of use and the medication's effectiveness are important characteristics of cessation medication for smokers with quit intentions. Understanding preferences for these cessation medication characteristics may help inform smoking cessation efforts.

Keywords

cessation; decision; health care provider; smokers; treatments

Tobacco use remains the leading cause of preventable morbidity and mortality in the United States.¹ Cigarette smoking is responsible for 480 000 deaths among adults annually and accounts for approximately 80% of deaths due to lung cancer and approximately 80% to 90% of chronic obstructive pulmonary disease deaths.² Despite considerable declines in cigarette smoking in the past 50 years, in 2012, an estimated 42.1 million adults (18.1%) reported current cigarette smoking.³ Given recent smoking estimates, the *Healthy People 2020* objective of reducing adult cigarette smoking prevalence to 12% or less may not be met.⁴

Quitting smoking is beneficial at any age, and smokers who quit before 35 years of age have mortality rates similar to persons who never smoked.^{5–7} While declines in smoking prevalence have slowed in recent years within the United States, the number of former smokers has exceeded the number of current smokers since 2002.^{8,9} Decreases in smoking prevalence are due in part to population-level strategies that are known to reduce tobacco use and include hard-hitting mass media campaigns, comprehensive smoke-free policies, increases in the prices of tobacco products, quitlines, and health care system changes.^{10–12}

Addressing cessation among adult smokers can be a challenge for multiple reasons, including the addictive properties of nicotine in tobacco products⁵ and protobacco marketing and promotion by the tobacco industry.¹³ In 2010, data from the National Health Interview Survey indicated that among adult current smokers, 68.8% reported wanting to quit and 52.4% reported making a quit attempt within the past year; however, among those who smoked for at least 2 years and former smokers who quit in the past year, only 6.2% were successful at quitting.¹⁴ On average, it takes approximately 10 to 14 quit attempts before smokers are successful at quitting.¹⁵ However, the likelihood of successful cessation can be increased through the use of cessation medications approved by the US Food and Drug Administration, including nicotine replacement therapy (patch, gum, lozenge, nasal spray, and inhaler), as well as oral medications, varenicline, and bupropion.¹⁰ These medications were used among close to 1 in 3 (30%) US adult current smokers who made an unsuccessful quit attempt in the past year and former smokers who quit within 2 years and who also reported using cessation counseling and/or cessation medications.¹⁴

While existing research has established the effectiveness of these cessation medications for treating nicotine dependence¹⁰ and provided the epidemiology of cessation behaviors,¹⁴ less is known about smokers' perceived importance for specific characteristics of medications used in cessation treatments.^{16–20} Assessment of smokers' perceived importance of cessation medication characteristics may provide an understanding about decision making

for cessation treatments, which can increase providers' knowledge on how to tailor their discussion with patients around the use of cessation medications.

To address this gap, the current study utilized the willingness-to-pay (WTP) paradigm, which focuses on a person's stated value of a good or service. While WTP has become increasingly popular in economic evaluation of health care interventions and programs in the last 2 decades, literature using this approach to investigate smokers' perceived importance for characteristics of tobacco cessation medications is limited.^{16,19,20,21} Almost all studies based on the WTP approach have shown that improving effectiveness of smoking cessation treatments is a key attribute that is valued by smokers.^{16,19,20} Some studies also suggest that smokers would prefer improved cessation medications with reduced side effects, particularly prevention of weight gain,^{16,20} while others conclude that light smokers have a stronger preference for reduced length of a therapy.¹⁹

Using data from the 2008 *HealthStyles* survey, we assessed among current smokers, interest in quitting, interest in using cessation medications, and willingness to pay for 3 specific characteristics of cessation medications: convenience of use, availability over the counter, and effectiveness of the medication to help with quitting. A better understanding of this topic may provide information about the characteristics of tobacco cessation medications that are important to smokers, which may help health care providers understand smokers' decision making on their use of cessation medications.

Methods

Sample

These study data are from Porter Novelli's 2008 HealthStyles survey, a national consumer survey licensed by the Centers for Disease Control and Prevention. The HealthStyles survey has been conducted annually since 1995 and assesses exposure to health-related information and self-reported symptoms, risk factors, and diseases among US adults aged 18 years or older. The sampling and data collection were conducted by Synovate, Inc. using a consumer mail-based panel.

The HealthStyles surveys use a probability sample of respondents from the ConsumerStyles survey. The 2008 ConsumerStyles was sent to 20 000 mail panel members including a main sample stratified by region, household income, population density, age, and household size, as well as oversamples for low-income and minority respondents and households with children. The response rate for the 2008 ConsumerStyles was 50.6% (n = 10,108). A random subset (n = 7000) of adults who completed ConsumerStyles were invited to participate in the 2008 HealthStyles; a total of 5399 responded (response rate: 77.1%). Because the focus of this study was cessation behaviors and preferences, the analysis was restricted to current smokers, who were defined as respondents who reported smoking at least 100 cigarettes in their lifetime and smoked every day or some days at the time of survey. In total, 4457 HealthStyles respondents were excluded from the analysis because they were not current smokers. Respondents with missing data on education (n = 14) and missing data on use of cigarette price promotions (n = 14) were also excluded, yielding a final sample size of 914.

Definition of measures

Cessation outcomes—Current smokers (n = 914) were asked whether or not they were interested in trying to quit smoking cigarettes for good. *Interested in quitting* was defined as current smokers who responded being interested or maybe interested in quitting smoking. *Interested in cessation medications* was defined as current smokers who were interested or maybe interested in quitting and who responded “yes” to interest in using cessation medications. Those who reported that they were interested in using medications to quit smoking were then asked, “What is the *most* you would be willing to pay for that medication out of your own pocket if you were purchasing medication to help quitting smoking?” There were 6 response options: “\$150,” “\$300,” “\$450,” “\$600,” “\$850,” and “none of the above.” For WTP, a dichotomous variable was created with “1” denoting individuals willing to pay \$300 or more and a “0” denoting individuals willing to pay the lower amount of \$150. “None of the above” respondents (n = 158) were excluded from this regression analysis because of the ambiguity of this response. The threshold of \$300 dollars was determined by the distribution of the data, as roughly 25% of respondents who were eligible for the WTP analysis would be willing to pay \$300 or more out of pocket for cessation medication.

Sociodemographic Characteristics—Sociodemographic characteristics included sex (male or female), age group (18–24, 25–54, 55 years), race/ethnicity (white non-Hispanic, black non-Hispanic, other non-Hispanic, Hispanic), educational attainment (high school or less, some college, college or more), marital status (married, formerly married, never married, domestic partnership), annual household income (<\$15 000, \$15 000–\$39 999, \$40 000–\$59 999, \$60 000), and health insurance status (yes or no). In addition, regional fixed effects were generated for US Census regions (Northeast, Midwest, West, and South) and used to control for regional time-invariant characteristics influencing smoking, such as antismoking sentiment.

Cessation correlates—Cessation-related variables that were examined included interest in using prescription tablets or nicotine gum, patches, inhalers, nasal sprays, and/or lozenges in helping quit smoking (yes or no); smokers’ perceived importance of the cessation medication characteristics, which include importance of medication costs, convenience of use, availability over the counter, and effectiveness of the medication (each variable taking a value of between 1 and 5, with 5 being “very important”). Confidence in the ability to pay was also measured and refers to smokers’ belief that they can actually pay the amount that they responded they are willing to pay and was measured on a scale of 1–4, with 4 being “very confident.” Exposure to a telephone quitline advertisement in the past 30 days and use of cigarette price promotions (eg, coupons, rebates, buy 1 get 1 free, “dollar-off,” and 2 for 1) when purchasing cigarettes (“never,” “rarely,” “sometimes,” “often,” “all of the time”) were also assessed.

Analysis

All statistical analyses were conducted using STATA (v12). Point estimates and 95% confidence intervals (CI) were generated using data weighted to provide estimates for the US adult population. Pear-son χ^2 tests were used to test for differences between groups at a significance level of *P* value of less than .05. Multivariate Probit analyses were conducted

using each of 3 dependent variables: (1) interested in quitting; (2) interested in using cessation medications; and (3) willingness to pay \$300 or more for medications.

Probit models were used in all regressions because the overall model *F*-statistics were higher for all specifications than those from logistic models. The joint significance of the model for interest in quitting had an *F*-statistic of 2.34 ($P = .001$) for Probit versus 2.16 ($P = .001$) for Logistic; for interest in using medicine to quit smoking of 3.50 ($P = .001$) for Probit versus 3.02 ($P = .001$) for Logistic; and for higher WTP of 1.54 ($P = .05$) for Probit versus 1.26 ($P > .10$) for Logistic. These *F*-statistics suggest that probabilities in the data are most appropriately modeled using the standard normal distribution function rather than the logistic distribution. Probit coefficients were transformed to marginal effects, which is interpreted as the difference in the investigated group compared with the reference group for categorical independent variables.²² The defined sociodemographic and cessation variables were included as covariates in the model to identify predictors of these 3 cessation measures.

Results

Sociodemographic and smoking behaviors by interest in quitting, interest in cessation medications, and WTP

A total of 914 (19.5%) current cigarette smokers were identified in the 2008 HealthStyles survey (see Supplemental Digital Content Table 1, available at <http://links.lww.com/JPHMP/A172>). Among these individuals, 612 (68.4%) reported an interest in quitting. Sociodemographic and smoking behaviors did not statistically differ by smokers' interest in quitting. Among those interested in quitting, 295 (45.6%) expressed an interest in using cessation medications (see Supplemental Digital Content Table 2, available at <http://links.lww.com/JPHMP/A173>). Compared with those not interested, those interested in using cessation medications were more likely to be non-Hispanic white (80.5%) and have an annual household income of \$60 000 or more (29.2%) and less likely to be non-Hispanic black (6.2%) and have an annual household income between \$15 000 and \$39 999 (29.6%). Interest in using cessation medications was also positively associated with the proportion of smokers' responding that they frequently used promotional offers when purchasing cigarettes. Among those who were interested in cessation medications (47.3%), were willing to pay \$150 or more for out-of-pocket expenses, while the rest (158) did not provide a figure for their WTP (see Supplemental Digital Content Table 3, available at: <http://links.lww.com/JPHMP/A174>). Compared with those who did not provide a WTP, smokers who reported WTP were more likely to have some college education (62.2% vs 41.4%), to have seen quitline advertisements (66.8% vs 54.1%), or to have some confidence in their WTP (47.0% vs 27.1%), but they were less likely to have high school education or less (29.5% vs 46.8%) or to be unconfident in their WTP (8.6% vs 26.1%).

Correlates of smokers' interest in quitting, interest in cessation medications, and WTP

After controlling for covariates, the proportion of smokers interested in quitting decreased with age (Table). Specifically, compared with smokers aged 55 years and older, interest in quitting was 22.2% (18.0 Probit regression coefficient; 95% CI, 5.0–31.1) higher among smokers aged 18 to 24 years, and 12.2% (9.9; CI, 1.9–17.8) higher among smokers aged 25

to 54 years. Similarly, compared with non-Hispanic whites, non-Hispanic black respondents were 12.6% (10.2; CI, 2.9–17.5) more likely to be interested in quitting.

Compared with non-Hispanic whites, non-Hispanic blacks were 69.4% (32.3; CI, 21.1–43.5) less likely to be interested in using cessation medications (Table). Interest in cessation medications was 75.4% (35.1; CI, 20.3–50.0) lower among smokers of other races or ethnicities. Compared with those with annual household income of \$60 000 or more, smokers with a household income between \$15 000 and \$39 999 were 39.8% (17.8; CI, 5.7–29.9) less interested in cessation medications. The use of promotional offers when purchasing cigarettes among smokers was associated with higher interest in using cessation medication. Compared with smokers who had never used promotional offers, those who reported “rarely” or “sometimes” using promotional offers were 55.2% (25.7; CI, 9.6–41.8) more interested in medications, while those who reported “often” or “always” used promotional offers were 52.6% (24.5; CI, 9.4–39.5) more likely to be interested.

Differences in WTP among those who were interested in using medications to quit were observed with respect to smokers’ sociodemographic and smoking behavioral characteristics. Compared with non-Hispanic whites, non-Hispanic black respondents were 68.5% (24.9; CI, 3.3–46.5) less likely to pay \$300 or more out of pocket. Similarly, smokers with an annual household income between \$15 000 and \$39 999 were 89.1% (32.4; CI, 1.6–48.8) less likely to pay \$300 or more for cessation medications than those with a household income of \$60 000 or more. However, smokers who had seen quitline advertisements in the past 30 days were 50.6% (18.4; CI, 1.3–35.4) more likely to pay \$300 or more out of pocket for cessation medications.

Compared with smokers who reported convenience of use as less important (1 and 2 in the scale of importance), those who reported convenience as very important were 59.4% (21.6; CI, 5.8–37.4) more likely to pay \$300 or more, and those who reported convenience of use as somewhat important were 122.1% (44.4; CI, 25.6–63.3) more likely to pay \$300 or more. With respect to the effectiveness of the products, smokers who reported this characteristic as “very important” were 45.4% (16.5; CI, 0.8–32.1) more likely to pay \$300 or more when compared with those who reported this was “somewhat important.” In addition, the level of confidence in the self-reported WTP was also positively associated with the likelihood of having a WTP of \$300 or more, with the likelihood rising by 41.8% (15.2; CI, 6.6–23.8) for each unit increase in the level of confidence.

Discussion

Our findings show that approximately 68% of current smokers are interested in quitting and close to half of these individuals are interested in using medications to assist with cessation. In addition, young smokers and non-Hispanic blacks were found to be more interested in quitting; although we found that non-Hispanic Blacks were less interested in using cessation medications than other racial/ethnic populations and among those interested in using medications, non-Hispanic Blacks were less willing to pay more for medications.

Consistent with existing literature, we found that smokers who have a desire to quit value the importance of cessation medications with successful quit rates,^{16,19,20} as the effectiveness of cessation products was associated with higher WTP. It is also important to note that none of the respondents reported low importance for the effectiveness of cessation medications, which validates the rationale that smokers do not want to pay for and utilize medications that are not effective in helping them quit. The negative association found between importance of medications being available over the counter and WTP to pay \$300 or more among the current smokers who were interested in quitting is not particularly surprising and provides partial support for the validity of the WTP measures, as very few over-the-counter medications would cost more than \$300. However, it should be noted that this finding does not necessarily mean that making the cessation medications available over the counter would not be valued by those who are interested in quitting.

We found that smokers who want to use medications to quit also value the importance of their convenience to use. This finding may provide a partial explanation as to why use of nicotine inhalers is very low, as they may not be as convenient to use as other types of cessation medications.¹⁸ In addition, we found that confidence in the ability to pay was positively associated with the maximum amount that respondents indicated they are willing to pay. This finding provides evidence of the validity of the survey measures and also suggests that smokers who are interested in quitting may be able and willing to financially commit to changing the behavior. However, smokers interested in quitting with a household income between \$15,000 and \$39,999 were significantly less likely to report having interest in using medications and significantly less likely to be willing to pay \$300 or more. These findings suggest the importance of socioeconomic status of smokers when determining cessation treatment options. Finally, it is also interesting to note that smokers who reported seeing telephone quitline advertisements were also willing to pay more for cessation medications. This finding suggests that in addition to a desire to quit, smokers who are prompted by cessation education and media communication may be willing to take action to change the behavior.

It should be noted that this study was informed by the 2008 update to the US Public Health Service *Clinical Practice Guideline: Treating Tobacco Use and Dependence* to understand the economics of decision making for smoking cessation. Therefore, our findings are based upon smokers' perceived importance of cessation medication characteristics. The 2008 update to the US Public Health Service *Clinical Practice Guideline: Treating Tobacco Use and Dependence* recommends that clinicians and health care delivery systems consistently identify and document tobacco use status and treat every tobacco user seen in a health care setting.¹⁰ These guidelines also recommend individual, group, and telephone counseling; the 7 first-line medications for tobacco dependence that are approved by the Food and Drug Administration; and provision of coverage for these treatments by health care systems, insurers, and purchasers to increase successful cessation attempts.¹⁰

In addition, several provisions in the Affordable Care Act provide opportunities for expanding state Medicaid cessation coverage.^{23–25} Effective October 2010, section 4107 of the Affordable Care Act required state Medicaid programs to cover tobacco cessation counseling and pharmacotherapy for pregnant women with no cost sharing. Effective

January 2014, through provisions of the section 2502 of the Affordable Care Act, state Medicaid programs can no longer exclude Food and Drug Administration–approved cessation medications, including over the counter medications, from Medicaid drug coverage. Although these provisions should increase Medicaid enrollees’ access to cessation medications, the extent to which it will do so remains unclear, particularly depending on state actions, such as whether or not cessation medications will be added to preferred drug lists, and the removal of barriers to accessing these medications. Therefore, additional research is needed to understand the dynamics of cessation efforts among smokers given the new health care legislation.

While the present study provides some novel findings in regard to what smokers’ value as important attributes of cessation medications, there are some limitations. First, data were self-reported, and thus the findings may be subject to recall bias, in particular, for respondents who reported seeing Quitline ads and using promotional offers. However, it should be noted that among smokers in our study, close to 68.4% reported having an interest in quitting, which is comparable with an estimate from the 2010 National Health Interview Survey (68.8%).¹⁴ It should also be noted that of the 914 smokers, only 123 were interested in quitting by using medications and were willing to pay \$150 or more for cessation medications, a monetary threshold that may be too high for WTP for cessation medications. Second, the study measures were also limited with respect to the range of costs that smokers are willing to pay, and the time frame and frequency of payment, which may have affected how smokers responded to the amount they would be willing to pay. In addition, “hypothetical bias” may exist when respondents were asked to present their WTPs without actual monetary transfers. However, existing experiments have shown that the “cheap talk” design as utilized in this study was successful in eliciting responses to hypothetical valuation questions that were indistinguishable from responses to valuation questions involving actual payments.²⁶ Although the study was conducted using 2008 data, it is unlikely that the value for characteristics of medication would change. However, additional studies based on more recent data are needed. Finally, since the Health-Styles is a cross-sectional survey, causal or temporal relationships could not be established.

In conclusion, the findings from this study indicate that a large proportion of adult current smokers who have an interest in quitting smoking also have an interest in using effective cessation medication and are willing to pay a substantial amount for certain features of cessation medications to obtain them. Smokers who are interested in quitting may perceive certain characteristics as important, such as medication’s effectiveness and the convenience in using cessation medications. While a contribution of this study is a better understanding of smokers’ WTP, the findings warrant additional research to test hypotheses on perceived importance of cessation treatments on actual quitting behaviors, using discrete choice experiments and longitudinal study designs. Because there are 45 million adult smokers, understanding the characteristics of cessation interventions valued by smokers who want to quit may help health care professionals in their efforts to assist in cessation and promote the use of known effective cessation medications.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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TABLE
 Regression Results, Marginal Effects From Multivariate Probit Models for 3 Cessation Outcomes^d

Dependent Variable	Interested/Maybe Interested in Quitting Smoking N = 774		Interested in Using Medication in Quitting Smoking N = 594		Willingness to Pay of >\$300 N = 123	
	Marginal Effect	95% CI	Marginal Effect	95% CI	Marginal Effect	95% CI
Sex						
Male	-4.5	-11.5 to 2.5	-7.7	-17.1 to 1.7	2.2	-13.8 to 18.1
Female	0	...	0	...	0	...
Age (y)						
18-24	18.0 ^b	5.0-31.1	-1.3	-33.8 to 7.8	3.2	-9.6 to 73.5
25-54	9.9 ^c	1.9-17.8	-2.1	-12.7 to 8.6	-9.0	-24.7 to 6.8
>55	0	...	0	...	0	...
Race/ethnicity						
White, non-Hispanic	0	...	0	...	0	...
Black, non-Hispanic	10.2 ^b	0.029-0.175	-32.3 ^d	-43.5 to -21.1	-24.9 ^c	-46.5 to -3.3
Hispanic	7.2	-0.015 to 0.158	-2.6	-20.5 to 15.2	12.5	-13.9 to 38.9
Other, non-Hispanic	-5.3	-0.269 to 0.163	-35.1 ^d	-50.0 to -20.3	-6.2	-7.1 to 34.8
Education						
High school degree or less	4.2	-0.069 to 0.154	12.1	-03.0 to 27.3	15.5	-8.5 to 39.4
Some college	8.7	-0.024 to 0.198	13.1	-1.7 to 27.9	5.3	-16.8 to 27.3
College degree or more	0	...	0	...	0	...
Marital status						
Married	0	...	0	...	0	...
Formerly married	3.5	-4.1 to 11.2	-5.6	-17.5 to 6.3	8.7	-13.8 to 31.1
Never married	5.4	-4.5 to 15.2	1.8	-12.3 to 15.9	0	-26.2 to 26.1
Domestic partnership	-5.0	-25.1 to 15.2	-16.5	-36.1 to 3.2	22.8	-11.9 to 57.5
Annual household income						
<\$15 000	-4.7	-14.6 to 5.2	-0.8	-14.8 to 13.2	-21.3	-50.2 to 7.5
\$15 000-\$39 999	-7.6	-15.8 to 0.6	-17.8 ^b	-29.9 to -5.7	-32.4 ^d	-48.8 to -16.0
\$40 000-\$59 999	-0.9	-9.2 to 7.4	-9.6	-23.8 to 4.5	-17.4	-40.6 to 5.8
\$60 000	0	...	0	...	0	...

Dependent Variable	Interested/Maybe Interested in Quitting Smoking N = 774		Interested in Using Medication in Quitting Smoking N = 594		Willingness to Pay of >\$300 N = 123	
	Marginal Effect	95% CI	Marginal Effect	95% CI	Marginal Effect	95% CI
Health insurance						
Yes	-3.4	-13.5 to 6.7	-0.9	-15.2 to 13.4	8.1	-10.4 to 26.7
No	0	...	0	...	0	...
Smoking frequency						
Some days	-0.3	-11.6 to 11.1	-0.2	-19.5 to 19.1	13.3	-21.9 to 48.6
Every day	0	...	0	...	0	...
Promotional offer use when buying cigarettes						
Never	0	...	0	...	0	...
Rarely/sometimes	7.0	-4.7 to 18.7	25.7 ^b	9.6-41.8	-6.2	-30.5 to 18.0
Often/all of the time	7.1	-4.1 to 18.4	24.5 ^b	9.4 to 39.5	-9.9	-35.7 to 15.9
Seen ad for telephone quitline (past 30 d)						
Yes	3.9	-3.9 to 11.6	10.3	-0.9 to 21.6	18.4 ^c	1.3-35.4
No	0	...	0	...	0	...
Unsure/missing	9.5 ^c	1.2-17.7	0.1	-13.7 to 13.8	14.1	-7.0 to 35.2
Likely to use prescription tablets						
Yes	...	...	...	...	-4.3	-25.6 to 17.1
No	...	...	...	...	0	...
Likely to use nicotine gum						
Yes	...	...	...	...	-1.6	-23.9 to 20.7
No	...	...	...	...	0	...
Likely to use nicotine patch						
Yes	...	...	...	...	21.0	-0.1 to 42.0
No	...	...	...	...	0	...
Likely to use nicotine inhaler						
Yes	...	...	...	...	-16.2	-47.3 to 15.0
No	...	...	...	...	0	...
Likely to use nicotine nasal spray						
Yes	...	...	...	...	8.8	-25.4 to 43.1
No	...	...	...	...	0	...

Dependent Variable	Interested/Maybe Interested in Quitting Smoking N = 774		Interested in Using Medication in Quitting Smoking N = 594		Willingness to Pay of >\$300 N = 123	
	Marginal Effect	95% CI	Marginal Effect	95% CI	Marginal Effect	95% CI
Likely to use nicotine lozenges						
Yes	...	...	...	...	-14.5	-42.7 to 13.8
No	...	...	...	...	0	...
Importance of convenience of use						
1 or 2	...	...	...	...	0	...
3 or 4	...	...	...	...	44.4 ^d	25.6–63.3
5	...	...	...	...	21.6 ^b	5.8–37.4
Importance of availability over the counter						
1 or 2	...	...	...	...	0	...
3 or 4	...	...	...	...	-32.5 ^c	-62.6 to -2.4
5	...	...	...	...	-38.2 ^c	-70.0 to -6.3
Importance of effectiveness of the therapy						
3 or 4	...	...	...	...	0	...
5	...	...	...	...	16.5 ^c	0.8–32.1
Confidence in willingness to pay						
1–4 (base level = not at all confident)	...	...	...	...	15.2 ^d	6.6–23.8
Division						
Northeast	0	...	0	...	0	...
Midwest	1.0	-8.7 to 10.7	0.3	-12.8 to 13.4	-25.4 ^c	-47.7 to -3.1
West	1.5	-9.0 to 11.9	-1.9	-14.6 to 10.7	-18.6	-40.2 to 3.0
South	0.2	-9.9 to 10.4	-12.8	-26.3 to 0.7	-34.8 ^b	-59.0 to -10.7

Abbreviation: CI, confidence interval.

^aThe average marginal effect for each variable is reported. Ellipses “...” indicate that these questions were not asked to all individuals in the sample.

^bStatistically significant at a $P < .01$ level.

^cStatistically significant at a $P < .05$ level.

^dStatistically significant at $P < .001$ level.